

PATENT  
29A 3453  
Express Mail Label No. EL980877108US

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:  
  
SHOHEI SATO  
  
For: ULTRASONIC PROBE AND  
MANUFACTURING METHOD  
THEREOF

Art Unit: --  
Examiner: --

**TRANSMITTAL OF INFORMATION DISCLOSURE STATEMENT**  
**UNDER 37 CFR 1.97(b)(1)**

Mail Stop Patent Application  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

Pursuant to 37 CFR 1.56, 1.97 and 1.98, Applicant for the above-identified application hereby submits legible copies of the following relevant arts along with the FORM PTO-1449 which contains the information required by 37 CFR 1.98(b):

- A. U.S. Patent No. 6,088,894 issued to Oakley et al. on July 18, 2000;
- B. U.S. Patent No. 5,548,564 issued to Smith on August 20, 1996;
- C. U.S. Patent No. 5,329,496 issued to Smith on July 12, 1994;
- D. U.S. Patent No. 6,441,538 issued to Spigelmyer on August 27, 2002;
- E. Japanese Patent Application Laid-Open (Kokai) No. 2001-29346 published in Japan on February 6, 2001;
- F. M. Zippardo et al., "Medical imaging phased arrays using multilayer ceramics and composites", *2000 IEEE Ultrasonics Symposium*;
- G. M. Zippardo et al., "Multilayer ceramics and composites for ultrasonic imaging arrays", *1999 IEEE Ultrasonics Symposium*, 947-952;
- H. Oakley et al., "A 2.5 MHz phased linear array made from stacked piezoelectric composite", *1998 IEEE Ultrasonics Symposium*, 999-1002;
- I. Oakley et al., "Stacked composite piezoelectric materials for 1.5-D arrays", *1997*

*IEEE Ultrasonics Symposium*, 923-926; and

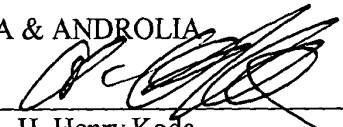
J. David M. Mills et al., "Combining multi-layers and composites to increase SNR for medical ultrasound transducers", *1996 IEEE Ultrasonics Symposium*, 1509-1512.

The above-listed prior art E is not in the English language, but the concise explanation of relevance of this prior art is incorporated in the specification pursuant to 37 CFR 1.98(a)(3). Nonetheless, an English language abstract of this prior art E is attached to the copy thereof.

It is, therefore, respectfully requested that the Patent Office make a record of these relevant art and consider them during the prosecution.

Respectfully submitted,

KODA & ANDROLIA

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FORM PTO-1449		Docket Number (Optional) 29A 3453		Application Number --		
INFORMATION DISCLOSURE CITATION IN AN APPLICATION		Applicant S. Sato				
(Use several sheets if necessary)		Filing Date --		Group Art Unit --		
<b>U.S. PATENT DOCUMENTS</b>						
EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	6,088,894	7/18/2000	Oakley et al.			
	5,548,564	8/20/1996	Smith			
	5,329,496	7/12/1994	Smith			
	6,441,538	8/27/2002	Spigelmeyer			
<b>FOREIGN PATENT DOCUMENTS</b>						
	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION (YES/NO)
	JP 2001-29346	2/6/2001	Japan			
<b>OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)</b>						
	M. Zippardo et al., "Medical imaging phased arrays using multilayer ceramics and composites", 2000 IEEE Ultrasonics Symposium					
	M. Zippardo et al., "Multilayer ceramics and composites for ultrasonic imaging arrays", 1999 IEEE Ultrasonics Symposium, 947-952					
	Oakley et al., "A 2.5 MHz phased linear array made from stacked piezoelectric composite", 1998 IEEE Ultrasonics Symposium, 999-1002					
	Oakley et al., "Stacked composite piezoelectric materials for 1.5-D arrays", 1997 IEEE Ultrasonics Symposium, 923-926					
	David M. Mills et al., "Combining multi-layers and composites to increase SNR for medical ultrasound transducers", 1996 IEEE Ultrasonics Symposium, 1509-1512					
EXAMINER		DATE CONSIDERED				
EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP § 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to the applicant.						